

Summary of Changes since the September 2012 CLARC Update

The most recent updates to toxicity values in CLARC (186 were added, 36 were changed, 1 was deleted) are summarized in the three tables below. These resulted in corresponding changes to Method B and Method C calculated cleanup levels for associated environmental media.

Table 1 lists the number of newly added oral cancer potency factors (CPFo), inhalation cancer potency factors (CPFi), oral reference doses (RfDo), and inhalation reference doses (RfDi), while Table 2 summarizes the number of existing values that were changed. Table 3 lists the 36 specific values that were changed (and the one that was deleted) and indicates whether toxicity of the chemical increased or decreased compared to the previous entry, and by how much.

Information in the tables is broken down by the source of the updated information:

- I = IRIS (Integrated Risk Information System) database from the Environmental Protection Agency (EPA)
- H = HEAST = Health Effects Assessment Summary Table from EPA
- C = Cal EPA = California Environmental Protection Agency
- A = ATSDR = Agency for Toxic Substances and Disease Registry
- P = PPRTV = Provisional Peer-Reviewed Toxicity Values from EPA
- X = PPRTV Appendix from EPA
- S = Other EPA sources

Note that EPA removed the oral RfD for acetone cyanohydrin from IRIS since the last CLARC update. The oral RfD for chlorpyrifos has been changed in CLARC; EPA removed the oral RfD from IRIS, but a value from ATSDR has been substituted. These changes are included in Tables 2 and 3.

For changes to CLARC prior to the current update, see “History of Changes to CLARC (prior to 2012)” below.

Table 1 – Summary of Toxicity Values Added to CLARC since September 2012

Source	CPFo added	CPFi added	RfDo added	RfDi added	Totals
IRIS	1	2	3	4	10
Cal EPA	34	58	4	18	114
ATSDR	0	0	7	11	18
PPRTV	2	0	6	7	15
PPRTV Appendix	1	1	15	3	20
Other EPA	0	4	0	5	9
Totals	38	65	35	48	186

Table 2 – Summary of Toxicity Values Changed in CLARC since September 2012

Source	CPFo changed	CPFi changed	RfDo changed	RfDi changed	Totals
IRIS	2	1	10	0	13
Cal EPA	1	1	0	0	2
ATSDR	0	0	2	0	2
PPRTV	5	0	7	1	13
PPRTV Appendix	1	0	2	2	5
Other EPA	0	0	1	0	1
Totals	9	2	22	3	36

Table 3 – Detailed Changes to Toxicity Values in CLARC since September 2012

Chemical Name	Parameter	Old Value	Source	New Value	Source	Toxicity Increase/ Decrease (Approx)
dimethoxybenzidine;3,3'-	CPFo	1.4E-02	H	1.6E+00	P	114x ↑
dimethylaniline;2,4-	CPFo	7.5E-01	H	2.0E-01	P	4x ↓
hexachloroethane	CPFo	1.4E-02	I	4.0E-02	I	3x ↑
methyl-5-nitroaniline;2-	CPFo	3.3E-02	H	9.0E-03	P	4x ↓
methylene chloride	CPFo	7.5E-03	I	2.0E-03	I	4x ↓
tcdd;2,3,7,8-	CPFo	1.5E+05	H	1.3E+05	C	1.2x ↓
toluidine;p-	CPFo	1.9E-01	H	3.0E-02	P	6x ↓
trichloroaniline;2,4,6-	CPFo	3.4E-02	H	7.0E-03	X	5x ↓
trimethyl phosphate	CPFo	3.7E-02	H	2.0E-02	P	2x ↓
hexachloroethane	CPFi	1.4E-02	H	3.9E-02	C	3x ↑
methylene chloride	CPFi	1.7E-03	H	3.5E-05	I	50x ↓
acetone cyanohydrin	RfDo	3.0E-03	I	removed	I	
biphenyl;1,1-	RfDo	5.0E-02	I	5.0E-01	I	10x ↓
calcium cyanide	RfDo	4.0E-02	H	1.0E-03	I	40x ↑
chlorpyrifos	RfDo	3.0E-03	I	1.0E-03	A	3x ↑
cresol;p-	RfDo	5.0E-03	H	1.0E-01	A	20x ↓
cyanide	RfDo	2.0E-02	I	6.0E-04	I	33x ↑
cyanogen	RfDo	4.0E-02	I	1.0E-03	I	40x ↑
dichloroethane;1,2-	RfDo	2.0E-02	H	6.0E-03	X	3x ↑
dinitrotoluene;2,6-	RfDo	1.0E-03	H	3.0E-04	X	3x ↑
ethoxyethanol acetate;2-	RfDo	3.0E-01	H	1.0E-01	P	3x ↑
ethoxyethanol;2-	RfDo	4.0E-01	H	9.0E-02	P	4x ↑
ethylene cyanohydrin	RfDo	3.0E-02	H	7.0E-02	P	2x ↓
formic acid	RfDo	2.0E+00	H	9.0E-01	P	2x ↑
hexachloroethane	RfDo	1.0E-03	I	7.0E-04	I	1.5x ↑
methanol	RfDo	5.0E-01	I	2.0E+00	I	4x ↑
methoxyethanol acetate;2-	RfDo	2.0E-03	H	8.0E-03	P	4x ↑
methoxyethanol;2-	RfDo	3.0E-03	H	5.0E-03	P	1.7x ↓
methylene chloride	RfDo	6.0E-02	I	6.0E-03	I	10x ↑
potassium cyanide	RfDo	5.0E-02	I	2.0E-03	I	25x ↑
potassium silver cyanide	RfDo	2.0E-01	I	5.0E-03	I	40x ↑
sodium cyanide	RfDo	4.0E-02	I	1.0E-03	I	40x ↑
trinitrophenylmethylnitramine	RfDo	4.0E-03	H	2.0E-03	P	2x ↑
vanadium	RfDo	7.0E-05	H	5.0E-03	S	71x ↓
acetone cyanohydrin	RfDi	1.7E-02	H	5.7E-04	X	30x ↑
dichlorodifluoromethane	RfDi	5.7E-02	H	2.9E-02	X	2x ↑
methacrylonitrile	RfDi	2.0E-04	H	8.6E-03	P	43x ↓

↑ = Increased Toxicity (22)

↓ = Decreased Toxicity (14)

Changes based on Cal EPA or ATSDR

History of Changes to CLARC (prior to October 2012)

Sort by Date		Sort by Chemical		Sort by Parameter	
Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Oral Reference Dose (RfDo)			
		Changes Made		Comments	
previous value:	1.E-02	mg/kg-day			
changed to:	6.E-03	mg/kg-day		Updated CLARC toxicity values from IRIS or NCEA (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Inhalation Reference Dose (RfDi)			
		Changes Made		Comments	
previous value:	see additional information			Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 2 on May 11 2011 3:54PM	
changed to:	1.1E-02	mg/kg-day		Updated CLARC toxicity values from IRIS or NCEA (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)			
		Changes Made		Comments	
changed to:	2.1E-03	kg-day/mg		Updated CLARC toxicity values from IRIS or NCEA (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value			
		Changes Made		Comments	
changed to:	2.1E+01	µg/L		Changes to CLARC cleanup levels based on updated toxicity values (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value			
		Changes Made		Comments	
previous value:	8.E+01	µg/L			
changed to:	4.8E+01	µg/L		Changes to CLARC cleanup levels based on updated toxicity values (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value			
		Changes Made		Comments	
changed to:	2.1E+02	µg/L		Changes to CLARC cleanup levels based on updated toxicity values (September 2012)	

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value			
		Changes Made		Comments	
previous value:	1.8E+02	µg/L			
changed to:	1.1E+02	µg/L			

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value			
		Changes Made		Comments	
changed to:	1.E+02	µg/L		Changes to CLARC cleanup levels based on updated	

		toxicity values (September 2012)
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Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.3E+03	µg/L	Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	4.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	4.8E+02	mg/kg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	6.3E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	2.1E+04	mg/kg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	5.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	9.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.2E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	2.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.7E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	6.3E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made	Comments
changed to:	9.1E-04 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	1.8E+01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	9.6E+00 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	4.E+01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	9.6E+01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	9.E-01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	2.E+00 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	4.E+00 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	8.8E+00 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	3.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	4.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.9E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	1.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.3E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.3E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
changed to:	6.8E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.9E-05	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.9E-06	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	2.1E-02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.6E-04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
changed to:	4.6E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Reference Dose (RfD _i)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to Hexachlorodibenzo-p-dioxin, mixture based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Reference Dose (RfD _o)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to Hexachlorodibenzo-p-dioxin, mixture based on CLARC toxicity information

Date of Change	Chemical	Parameter
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5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
changed to:	6.2E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Inhalation Cancer Potency Factor (CPF _i)	
	Changes Made		Comments
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Inhalation Reference Dose (RfD _i)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Oral Reference Dose (RfD _o)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]pyrene	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to Benzo(a)pyrene based on CLARC toxicity information
Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]pyrene	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to Benzo(a)pyrene based on CLARC toxicity information
Date of Change	Chemical	Parameter	
5/11/2011	indeno[1,2,3-cd]pyrene	Inhalation Cancer Potency Factor (CPF _i)	
	Changes Made		Comments
previous	Researched-No Data		

value:			
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	see additional information		Changes to Viny Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	see additional information		Changes to Viny Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Oral Cancer Potency Factor (CPF _o)

	Changes Made		Comments
changed to:	see additional information		Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.2E-07	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Surface Water, Method B, Carcinogen, Standard Formula Value
changed to:	8.6E-09	µg/L
Changes Made		
Comments		
Changes to CLARC cleanup levels based on updated toxicity values (December 2010)		
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.		
Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
changed to:	1.5E-03	mg/kg
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.		
Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
changed to:	1.1E-05	mg/kg
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.		
Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Ground Water, Method C, Carcinogen, Standard Formula Value
changed to:	5.8E-06	µg/L
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.		
Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Ground Water, Method B, Carcinogen, Standard Formula Value
changed to:	5.8E-07	µg/L
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.		
Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Oral Cancer Potency Factor (CPFo)
changed to:	1.5E+05	kg-day/mg
Changes Made		Comments
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Surface Water, Method C, Carcinogen, Standard Formula Value
changed to:	7.4E+00	µg/L
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.		
Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Surface Water, Method B, Carcinogen, Standard Formula Value
changed to:	3.E-01	µg/L
Changes Made		Comments
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.		
Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E-01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
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changed to:	7.3E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
5/11/2011	aroclor 1254	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
5/11/2011	aroclor 1016	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	zinc	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	0.E+00	µg/m3	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	xlenes	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/m3	
changed to:	1.E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xlenes	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+01	µg/m3	
changed to:	4.6E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xlenes	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	2.9E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	

changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
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previous value:	3.5E+04	µg/L	
changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	white mineral oil	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	3.E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+00	µg/m3	
changed to:	5.7E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E-01	µg/m3	
changed to:	5.7E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.2E+01	µg/L	
changed to:	1.9E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	vinyl chloride	Surface Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	3.7E+00	µg/L	
changed to:	7.7E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	8.8E+01	mg/kg	
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	6.7E-01	mg/kg	
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.9E-01	µg/L	
changed to:	6.1E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.9E-02	µg/L	
changed to:	6.1E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Oral Cancer Potency Factor (CPFo)	
		Changes Made	Comments
changed to:	7.2E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Inhalation Cancer Potency Factor (CPF _i)	
		Changes Made	Comments
previous value:	3.1E-02	kg-day/mg	
changed to:	1.5E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadyl sulfate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	7.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadyl sulfate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadyl sulfate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	vanadium pentoxide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium pentoxide	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E+01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+04	mg/kg	
changed to:	2.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+02	mg/kg	
changed to:	5.6E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+02	µg/L	
changed to:	2.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadium	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	1.1E+02	µg/L	
	changed to: 1.1E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadium	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	7.E-03	mg/kg-day	
	changed to: 7.E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	1.1E+04	mg/kg	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	2.4E+02	mg/kg	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	3.E-03	mg/kg-day	
	changed to: No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	trinitrophenylmethylnitramine	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	3.5E+04	mg/kg	
	changed to: 1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trinitrophenylmethylnitramine	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	8.E+02	mg/kg	
	changed to: 3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	9.4E+06	mg/kg	
changed to:	1.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.1E+05	mg/kg	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.4E+04	µg/L	
changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.3E+04	µg/L	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trinitrobenzene;1,3,5-	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	2.7E+00	mg/kg-day	
	changed to: 3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Air, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	6.E+00	µg/m3	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Air, Method B, Non-Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	2.7E+00	µg/m3	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	1.8E+05	mg/kg	
	changed to: 3.5E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	4.E+03	mg/kg	
	changed to: 8.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	8.8E+02	µg/L	
	changed to: 1.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	4.E+02	µg/L	
	changed to: 8.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	trimethylbenzene;1,3,5-	Oral Reference Dose (RfDo)
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	Changes Made		Comments
previous value:	5.E-02	mg/kg-day	
changed to:	1.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,3,5-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E+00	µg/m3	
changed to:	7.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E+00	µg/m3	
changed to:	3.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.E+02 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	5.E-02 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	1.7E-03 mg/kg-day	
changed to:	2.E-03 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+04 mg/kg	
changed to:	1.1E+04 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.E+02 mg/kg	
changed to:	2.4E+02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.8E+01 µg/L	
changed to:	5.3E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.E+01 µg/L	
changed to:	2.4E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.9E+01	mg/kg	
changed to:	4.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.1E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	3.3E-02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.8E+02	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.3E-02	µg/L	
changed to:	1.5E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	6.3E-03	µg/L	
changed to:	1.5E-03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.8E+01	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	6.E-03	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	7.E+00	kg-day/mg	
changed to:	3.E+01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichlorophenol;2,4,6-	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.1E+01	µg/L	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	2.4E+01	mg/kg	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.3E+00	µg/L	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloroethylene	Oral Reference Dose (RfDo)	
	Changes Made		Comments
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made	Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.1E+04	µg/m3
changed to:	5.E+03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.8E+03	µg/m3
changed to:	2.3E+03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.E+06	µg/L IRIS update
changed to:	2.3E+06	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	3.E+00	mg/kg-day
changed to:	1.4E+00	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.E+02	µg/m3
changed to:	2.E+00	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+01	µg/m3	
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.7E-02	mg/kg-day	
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+02	mg/kg	
changed to:	1.1E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+00	mg/kg	
changed to:	2.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-05	mg/kg-day	
changed to:	3.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	toluenediamine;2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct

		Contact (ingestion only), industrial land use
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	Changes Made		Comments
previous value:	2.1E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.8E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.6E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,5-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	6.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.1E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	3.2E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	4.9E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.9E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	1.4E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.9E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	thallium, soluble salts	Ground Water, Method C, Non-carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	2.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium, soluble salts	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.4E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	8.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.4E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.8E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.3E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	8.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	2.8E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.4E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.8E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.3E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	8.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.2E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	7.2E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.2E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.4E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	9.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from

			MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	thallic oxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	2.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallic oxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallic oxide	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallic oxide	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallic oxide	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	7.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethylene	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.2E+00	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.5E+01	µg/m3	

changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E-01	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)	
changed to:	Changes Made		Comments
	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethylene	Inhalation Cancer Potency Factor (CPFi)	
changed to:	Changes Made		Comments
	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethane;1,1,2,2-	Air, Method C, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	4.3E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethane;1,1,2,2-	Air, Method B, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	4.3E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethane;1,1,2,2-	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	Researched-No Data		
changed to:	2.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethane;1,1,2,2-	Inhalation Cancer Potency Factor (CPFi)	
previous value:	Changes Made		Comments
	2.E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	tetrabromodiphenyl ether 2,2',4,4'	Air, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	3.5E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
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4/13/2011	tetrabromodiphenyl ether 2,2',4,4'	Air, Method B, Non-Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
4/13/2011	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
4/13/2011	tcdd;2,3,7,8-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.5E+05	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tcdd;2,3,7,8-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	1.5E+05	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.4E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	3.3E+01 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.5E+01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.5E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	3.E-02 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	styrene	Inhalation Cancer Potency Factor (CPFi)

Changes Made		Comments
previous value:	2.E-03 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+04 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.E+02 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	5.E-03	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.1E+01	mg/kg
changed to:	4.4E+01	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	8.3E-02	mg/kg
changed to:	3.3E-01	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.6E-02	µg/L
changed to:	1.5E-01	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.6E-03	µg/L
changed to:	1.5E-02	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.2E+01	kg-day/mg
changed to:	3.E+00	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	propylene glycol	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.E+03	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	propylene glycol	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	propylene glycol	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	polychlorinated biphenyls	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.4E-02	µg/m3	
changed to:	4.4E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polychlorinated biphenyls	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.4E-03	µg/m3	
changed to:	4.4E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polychlorinated biphenyls	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.6E-03	µg/L	
changed to:	2.6E-03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polychlorinated biphenyls	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E-04	µg/L	
changed to:	1.E-04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polybrominated biphenyls	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polybrominated biphenyls	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polybrominated biphenyls	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.9E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.5E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	3.4E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	phenol	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+06	µg/L	
changed to:	1.4E+06	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phenol	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+06	µg/L	
changed to:	5.6E+05	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	2.1E+06	mg/kg	
changed to:	1.1E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	4.8E+04	mg/kg	
changed to:	2.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+04	µg/L	
changed to:	5.3E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.8E+03	µg/L	
changed to:	2.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	6.E-01	mg/kg-day	
changed to:	3.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	perthane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	4.E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	perthane	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
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4/13/2011	perthane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
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	Changes Made		Comments
previous value:	3.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	perthane	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	perthane	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	perthane	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	3.3E-04	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E+02	µg/L	
changed to:	3.7E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+04	µg/L	
changed to:	3.E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E+00	µg/L	
changed to:	1.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	pentachlorophenol	Surface Water, Method B, Non-Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	7.1E+03	µg/L	
changed to:	1.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	3.3E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+05	mg/kg	
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.3E+00	mg/kg	
changed to:	2.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+03	mg/kg	
changed to:	4.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.3E+00	µg/L	
changed to:	2.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+03	µg/L	
changed to:	1.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	7.3E-01	µg/L	
changed to:	2.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+02	µg/L	
changed to:	8.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-02	mg/kg-day	
changed to:	5.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.2E-01	kg-day/mg	
changed to:	4.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.6E-01	µg/L	
changed to:	8.E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E-01	µg/L	
changed to:	3.2E-02	µg/L	Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	paraquat	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	paraquat	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	paraquat	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.5E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	pah	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pah	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pah	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	octabromodiphenyl ethers	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous	1.1E+01	µg/m3	

value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	octabromodiphenyl ethers	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous	3.5E+04	mg/kg	

value:			
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.6E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	7.2E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	7.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	9.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.2E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, m-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	1.8E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, m-	Ground Water, Method B, Non-carcinogen, Standard Formula

		Value	
	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	8.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	9.4E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	7.1E-03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.4E+02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	nitrosodimethylamine;N-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitrosodimethylamine;N-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	nitropropane;2-	Air, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.3E-03	µg/m3	
changed to:	9.3E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.3E-04	µg/m3	
changed to:	9.3E-04	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	9.5E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	9.4E+00	kg-day/mg	

changed to:	9.5E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	8.8E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.7E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.8E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.8E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.5E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E-01	µg/m3	
changed to:	9.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E-01	µg/m3	
changed to:	4.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	1.1E+03	µg/L
changed to:	4.5E+03	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	4.5E+02	µg/L
changed to:	1.8E+03	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments
previous value:	1.8E+03	mg/kg
changed to:	7.E+03	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	4.E+01	mg/kg
changed to:	1.6E+02	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Ground Water, Method C, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	8.8E+00	µg/L
changed to:	3.5E+01	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Ground Water, Method B, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	4.E+00	µg/L
changed to:	1.6E+01	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Oral Reference Dose (RfDo)
Changes Made		Comments
previous value:	5.E-04	mg/kg-day
changed to:	2.E-03	mg/kg-day
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E-04	mg/kg-day	
changed to:	2.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.4E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitroaniline, 2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E-01	µg/m3	
changed to:	5.E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitroaniline, 2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E-02	µg/m3	
changed to:	2.3E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitroaniline, 2-	Oral Reference Dose (RfD _o)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitroaniline, 2-	Inhalation Reference Dose (RfD _i)

	Changes Made		Comments
previous value:	5.7E-05	mg/kg-day	
changed to:	1.4E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrite	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	5.6E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	8.E+03	mg/kg
changed to:	1.3E+05	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments
previous value:	1.4E+06	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	3.2E+04	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Oral Reference Dose (RfDo)
Changes Made		Comments
previous value:	4.E-01	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mirex	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments
previous value:	7.3E+01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	5.6E-01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Ground Water, Method C, Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	4.9E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.8E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	8.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.5E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylhydrazine	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylhydrazine	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylhydrazine	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylhydrazine	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylhydrazine	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	5.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.5E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.5E-01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	2.5E-01 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylene diphenyl diisocyanate (PMDI)	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.E-01 µg/m3	
changed to:	6.E-01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene diphenyl diisocyanate (MDI)	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.E-01 µg/m3	
changed to:	6.E-01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.4E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	8.6E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylene bromide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.7E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.7E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.E+03	mg/kg	
changed to:	1.3E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+03	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.7E+00	mg/kg	
changed to:	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	5.6E+01 mg/kg	
changed to:	1.6E+02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	7.E-04 mg/kg-day	
changed to:	2.E-03 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.3E-01 kg-day/mg	
changed to:	1.E-01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Inhalation Cancer Potency Factor (CPFi)

Changes Made		Comments
previous value:	1.3E-01 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylcyclohexane	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylcyclohexane	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.4E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylcyclohexane	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	8.6E-01 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	5.5E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.2E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	2.4E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	7.3E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	5.6E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.8E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.6E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.6E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.3E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.9E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.9E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd

			updated from 0 to 3 on May 11 2011 3:54PM
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Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	4.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	1.8E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.1E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	3.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/m3	
changed to:	1.4E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	8.6E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+03	µg/m3	
changed to:	5.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+02	µg/m3	
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E-01	mg/kg-day	
changed to:	1.4E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+03	mg/kg	
changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+01	mg/kg	
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.9E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	4.6E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mercury	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Ground Water, Method B, Non-carcinogen, Standard Formula

	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E-03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-07	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	indeno[1,2,3-cd]pyrene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydroquinone	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	6.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+00	µg/m3	
changed to:	2.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous	4.6E-01	µg/m3	

value:			
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E-04	mg/kg-day	
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+00	µg/m3	
changed to:	8.E-01	µg/m3	Changes to CLARC cleanup levels based on updated

			toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+00	µg/m3	
changed to:	3.7E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	2.1E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	4.8E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+02	µg/L	
changed to:	1.1E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	4.8E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	6.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	8.6E-04	mg/kg-day	
changed to:	2.3E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hydrazine sulfate	Oral Cancer Potency Factor (CPFo)	
previous value:	Changes Made		Comments
	Researched-No Data		
	changed to:	3.E+00	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hydrazine sulfate	Inhalation Cancer Potency Factor (CPFi)	
previous value:	Changes Made		Comments
	Researched-No Data		
	changed to:	1.7E+01	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hydrazine	Inhalation Reference Dose (RfDi)	
previous value:	Changes Made		Comments
	Researched-No Data		
	changed to:	8.6E-06	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hexamethylene diisocyanate;1,6-	Air, Method B, Non-Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	4.6E-03	µg/m3	
	changed to:	4.6E-03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Cancer Potency Factor (CPFo)	
previous value:	Changes Made		Comments
	6.2E+03	kg-day/mg	
	changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Cancer Potency Factor (CPFi)	
previous value:	Changes Made		Comments
	4.6E+03	kg-day/mg	
	changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hexachlorobutadiene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	4.7E+02	µg/L	
	changed to:	2.3E+03	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	hexachlorobutadiene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.9E+02	µg/L	
changed to:	9.3E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+02	mg/kg	
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+01	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	1.8E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	8.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-04	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	3.2E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	7.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	1.6E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	7.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/L	
changed to:	3.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	2.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	glycidaldehyde	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furium	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.6E+00	mg/kg	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	furium	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E-02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furium	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	5.E+01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	furfural	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	5.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furfural	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	2.3E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furfural	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formic acid	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E+00	µg/m3	
changed to:	1.9E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E-01	µg/m3	
changed to:	1.9E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	5.3E+05	mg/kg	
changed to:	7.E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.6E+03	µg/L	
changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E+03	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Oral Reference Dose (RfDo)	
	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	formaldehyde	Inhalation Cancer Potency Factor (CPFi)	
	Changes Made		Comments
changed to:	4.6E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	fluoride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	2.1E+05	mg/kg	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	fluoride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.8E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	6.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	8.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.5E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethylene oxide	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene oxide	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	9.8E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.3E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.3E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Inhalation Cancer Potency Factor (CPF _i)	
	Changes Made		Comments
previous value:	3.5E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.3E+04	µg/m3	
changed to:	1.6E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.9E+03	µg/m3	
changed to:	7.3E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+06	mg/kg	
changed to:	3.5E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+04	mg/kg	
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+03	µg/L	
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+03	µg/L	
changed to:	8.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-01	mg/kg-day	
changed to:	1.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	3.7E+00	mg/kg-day	
changed to:	4.6E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E-01	µg/m3	
changed to:	4.2E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	9.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E-02	µg/m3	
changed to:	4.2E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	4.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-04	mg/kg-day	
changed to:	2.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	7.7E-01	kg-day/mg	
changed to:	2.1E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made	Comments
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previous value:	7.E+04	mg/kg	
changed to:	3.2E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	7.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+02	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	7.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	9.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+06	mg/kg	
changed to:	1.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+04	mg/kg	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+03	µg/L	
changed to:	5.3E+02	µg/L	Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+03	µg/L	
changed to:	2.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-01	mg/kg-day	
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.5E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	4.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	2.9E+00	mg/kg-day	
changed to:	2.9E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethyl chloride	Oral Cancer Potency Factor (CPFo)	

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethion	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.E+02	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethion	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	9.1E+01	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethion	Inhalation Reference Dose (RfD _i)

	Changes Made	Comments
previous value:	5.7E-02	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.6E-01	µg/m3
changed to:	4.6E-01	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	7.E+03	mg/kg
changed to:	2.1E+04	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made	Comments
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previous value:	1.6E+02	mg/kg	
changed to:	4.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	1.1E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	4.8E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	6.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	9.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous	1.6E+01	mg/kg	

value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.1E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.6E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	1.3E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+01	mg/kg	
changed to:	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+01	µg/L	
changed to:	4.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	4.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-02	kg-day/mg	
changed to:	1.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Ground Water, Method B, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.2E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Oral Reference Dose (RfDo)
	Changes Made	Comments
previous value:	2.E-02	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Air, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.5E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.6E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Inhalation Reference Dose (RfDi)
	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,4-	Air, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	7.E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.2E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	dinitrotoluene;2,4-	Inhalation Reference Dose (RfDi)
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	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.3E-01	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.3E-02	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	1.9E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	1.5E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.3E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.3E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Oral Cancer Potency Factor (CPFo)
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	Changes Made		Comments
previous value:	6.8E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+03	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+01	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	3.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	1.6E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-04	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.4E+03	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.2E+01	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	3.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	1.6E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;o-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	4.E-04	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	dimethylhydrazine;1,1-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
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	Changes Made		Comments
previous value:	5.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.8E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.7E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.7E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-07	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.6E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Inhalation Cancer Potency Factor (CPF _i)

Changes Made		Comments
previous value:	3.5E+00 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.4E+01 mg/kg	
changed to:	1.2E+01 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.1E-01 mg/kg	
changed to:	9.1E-02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-02 µg/L	
changed to:	8.E-02 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-03 µg/L	
changed to:	8.E-03 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Oral Cancer Potency Factor (CPF _o)

Changes Made		Comments
previous value:	9.2E+00 kg-day/mg	
changed to:	1.1E+01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	2.9E+03 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	2.2E+01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	4.6E-02	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E+05	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.2E+04	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.5E+06	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dimethyl phthalate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	8.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethyl phthalate	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethyl phthalate	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethyl phthalate	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical	Parameter	
4/13/2011	diethylstilbesterol	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E-04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	diethylstilbesterol	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E-05	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	diethylstilbesterol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	2.8E-02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	diethylstilbesterol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
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	Changes Made		Comments
previous value:	2.1E-04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylstilbesterol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	4.7E+03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	diethylstilbesterol	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	4.9E+02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	diethylformamide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.9E+04	mg/kg	
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylformamide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.8E+02	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylformamide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.1E-02	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	2.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	4.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	6.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monoethyl ether	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+01	µg/m3	
changed to:	1.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+00	µg/m3	
changed to:	4.6E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.7E-03	mg/kg-day	
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Air, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	2.1E-01	µg/m3	
	changed to: 7.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Air, Method B, Non-Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	9.6E-02	µg/m3	
	changed to: 3.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	1.1E+05	mg/kg	
	changed to: 2.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	2.4E+03	mg/kg	
	changed to: 6.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	5.3E+02	µg/L	
	changed to: 1.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	2.4E+02	µg/L	
	changed to: 6.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	3.E-02	mg/kg-day	
	changed to: 8.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	6.E-05	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.E-01	µg/m3	
changed to:	5.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.5E+02	mg/kg	
changed to:	4.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.4E+00	mg/kg	
changed to:	3.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+00	µg/L	
changed to:	1.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E-01	µg/L	
changed to:	1.5E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.9E-01	kg-day/mg	
changed to:	2.9E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.7E+02	µg/L	
changed to:	8.5E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E+01	µg/L	
changed to:	3.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.3E+02	mg/kg	
changed to:	1.3E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	4.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E-01	µg/L	
changed to:	4.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.8E-01	kg-day/mg	
changed to:	1.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	2.3E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.9E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	6.8E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	6.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/m3	

changed to:	2.7E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	1.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	9.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.2E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.8E+02	µg/m3
changed to:	2.E+02	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	8.E+01	µg/m3
changed to:	9.1E+01	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	5.E-02	mg/kg-day
changed to:	5.7E-02	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.2E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.9E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	5.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.4E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+02	µg/m3	
changed to:	2.E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+01	µg/m3	
changed to:	9.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	

changed to:	5.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.4E-03	µg/m3	
changed to:	6.E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.4E-04	µg/m3	
changed to:	6.E-04	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	9.3E+00	kg-day/mg	
changed to:	1.5E+01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.6E+01	µg/m3	
changed to:	4.2E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.6E+00	µg/m3	
changed to:	4.2E-04	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	9.4E+01	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.1E-01	mg/kg	
changed to:	1.3E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.1E-01	µg/L	
changed to:	5.5E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.1E-02	µg/L	
changed to:	5.5E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.4E+00	kg-day/mg	
changed to:	8.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	2.4E-03	kg-day/mg	
changed to:	2.1E+01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct

		Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	7.E+03	mg/kg	
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dibenzofuran	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.6E+02	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dibenzofuran	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.E+01	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dibenzofuran	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E+01	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dibenzofuran	Oral Reference Dose (RfDo)	
	Changes Made		Comments
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dibenzo[a,h]anthracene	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	diazinon	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	3.2E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	diazinon	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous	7.2E+01	mg/kg	

value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method B, Non-Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	1.1E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.9E+04	mg/kg	
changed to:	1.9E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ddd	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ddd	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ddd	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cyclohexane	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.7E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cyclohexane	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E+00	mg/kg-day	
changed to:	1.7E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	copper	Surface Water, Method C, Non-Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	6.7E+03	µg/L	
changed to:	7.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E+03	µg/L	
changed to:	2.9E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.3E+05	mg/kg	
changed to:	1.4E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.E+03	mg/kg	
changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+03	µg/L	
changed to:	1.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.9E+02	µg/L	
changed to:	6.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	copper	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.7E-02	mg/kg-day	
changed to:	4.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chrysene	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
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previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-03	µg/m3	
changed to:	1.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E-03	µg/m3	
changed to:	4.6E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.3E-06	mg/kg-day	
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	4.2E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	7.3E+03	mg/kg	
	changed to: 2.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	5.6E+01	mg/kg	
	changed to: 1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Ground Water, Method C, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	2.4E+01	µg/L	
	changed to: 6.9E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Ground Water, Method B, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	2.4E+00	µg/L	
	changed to: 6.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	Researched-No Data		
	changed to: 1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Inhalation Reference Dose (RfDi)	
previous value:	Changes Made		Comments
	Researched-No Data		
	changed to: 1.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Oral Cancer Potency Factor (CPFo)	
previous value:	Changes Made		Comments
	1.8E-02	kg-day/mg	
	changed to: 6.3E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;o-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments

previous value:	5.3E+03	mg/kg	
changed to:	4.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+01	mg/kg	
changed to:	3.3E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	2.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	2.9E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.5E-02	kg-day/mg	
changed to:	3.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Air, Method B, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	1.4E+00	µg/m3	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Surface Water, Method C, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	3.3E+03	µg/L	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Surface Water, Method B, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	1.3E+02	µg/L	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	1.E+04	mg/kg	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	7.7E+01	mg/kg	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Ground Water, Method C, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	3.4E+01	µg/L	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Ground Water, Method B, Carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	3.4E+00	µg/L	
	changed to: Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloromethane	Inhalation Reference Dose (RfDi)	
previous	Changes Made		Comments
	Researched-No Data		

value:			
changed to:	2.6E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.3E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	6.3E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.1E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+01	µg/L	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	chloroform	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	6.1E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+06	mg/kg	
changed to:	1.4E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+04	mg/kg	
changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+03	µg/L	
changed to:	7.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	3.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-01	mg/kg-day	
changed to:	4.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+02	µg/L	
changed to:	5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+05	mg/kg	
changed to:	1.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+03	µg/L	
changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzilate	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzilate	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzilate	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzilate	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.7E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	2.7E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Inhalation Cancer Potency Factor (CPFi)	

	Changes Made		Comments
previous value:	2.7E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.8E+01	µg/m3	
changed to:	5.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	8.E+00	µg/m3	
changed to:	2.3E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Inhalation Reference Dose (RfDi)	

Changes Made		Comments
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previous value:	5.E-03	mg/kg-day	
changed to:	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.7E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.5E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	5.8E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.3E+02	mg/kg
changed to:	3.3E+02	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	2.5E+00	mg/kg
changed to:	2.5E+00	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.2E+00	µg/L
changed to:	2.2E+00	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.2E-01	µg/L
changed to:	2.2E-01	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	4.E-01	kg-day/mg
changed to:	4.E-01	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	carbophenothion	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbophenothion	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Ground Water, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.3E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E+00	µg/m3	
changed to:	4.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E-01	µg/m3	
changed to:	4.2E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.6E+01	µg/L	
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.4E+02	µg/L	
changed to:	1.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
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4/13/2011	carbon tetrachloride	Surface Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.7E+00	µg/L	
changed to:	4.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	9.7E+01	µg/L	
changed to:	5.5E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	1.E+03	mg/kg	
changed to:	1.9E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	2.5E+03	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	7.7E+00	mg/kg	
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	5.6E+01	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Ground Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	3.4E+00	µg/L	
changed to:	6.3E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
		Changes Made	Comments

previous value:	1.2E+01	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.4E-01	µg/L	
changed to:	6.3E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.6E+00	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-04	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.3E-01	kg-day/mg	
changed to:	7.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	5.3E-02	kg-day/mg	
changed to:	2.1E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbazole	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	6.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	5.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	2.E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	captan	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	3.8E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captan	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	3.5E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	captafol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.6E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E+01	µg/L	
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+01	µg/L	
changed to:	4.1E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-04	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd

			updated from 0 to 3 on May 11 2011 3:53PM
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Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	6.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	3.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+03	µg/L	
changed to:	1.3E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.9E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-01	µg/m3	
changed to:	8.3E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-02	µg/m3	
changed to:	8.3E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E-01	µg/m3	
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+03	mg/kg	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.6E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Oral Reference Dose (RfDo)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
changed to:	1.1E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-01	µg/m3	
changed to:	7.8E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-02	µg/m3	
changed to:	7.8E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	8.6E-04	mg/kg-day	
changed to:	8.6E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	1.1E-01	kg-day/mg	
changed to:	1.1E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	9.4E+02	mg/kg	
changed to:	1.9E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.1E+00	mg/kg	
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+01	µg/m3	
changed to:	2.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+00	µg/m3	
changed to:	9.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+05	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
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4/13/2011	bis(2-chloro-1-methyl-ethyl)ether	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	4.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	biphenyl;1,1-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.2E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.E+01	µg/m3	
changed to:	1.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.6E+00	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.E+04	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous	2.3E+02	mg/kg	

value:			
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E+01	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.3E+01	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	2.9E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+06	mg/kg	
changed to:	3.5E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+04	mg/kg	
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	benzyl alcohol	Ground Water, Method C, Non-carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	5.3E+03	µg/L	
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+03	µg/L	
changed to:	8.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-01	mg/kg-day	
changed to:	1.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzo[k]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzo[b]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzo[a]pyrene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-02	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzo[a]pyrene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-03	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzo[a]pyrene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	6.1E+00	kg-day/mg	

changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	benzo[a]anthracene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.4E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	8.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium and compounds	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.3E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium and compounds	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	1.4E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	azobenzene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.1E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	8.1E-01	µg/m3	

Date of Change	Chemical	Parameter
4/13/2011	azobenzene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	8.1E-02	µg/m3	

Date of Change	Chemical	Parameter
4/13/2011	azobenzene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	1.1E-04	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
changed to:	1.1E-01	kg-day/mg	

Date of Change	Chemical	Parameter
4/13/2011	atrazine	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	6.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/13/2011	atrazine	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/13/2011	atrazine	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	2.2E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	arsine	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	5.E-02	µg/m3	
changed to:	5.E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	5.3E+04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.4E+04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	1.5E+01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	aramite	Air, Method C, Carcinogen, Standard Formula Value	

Changes Made		Comments
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previous value:	3.5E+00	µg/m3	
changed to:	3.5E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aramite	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	3.5E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aramite	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	2.5E-02	kg-day/mg	
changed to:	2.5E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from

			MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical	Parameter	
4/13/2011	aniline	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aniline	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aminopyridine;4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	7.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aminopyridine;4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aminopyridine;4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aminopyridine;4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	aminopyridine;4-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+05	mg/kg	
changed to:	2.8E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+03	mg/kg	
changed to:	6.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-02	mg/kg-day	
changed to:	8.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	allyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	4.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	allyl alcohol	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.1E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.2E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.6E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acrylic acid	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E-02	µg/m3	
changed to:	2.5E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E-03	µg/m3	
changed to:	2.5E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.9E+01	mg/kg	
changed to:	2.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+02	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.2E-01	mg/kg	
changed to:	2.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous	1.6E+01	mg/kg	

value:			
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.7E-02	µg/L	
changed to:	8.8E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.7E-03	µg/L	
changed to:	8.8E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-04	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	4.5E+00	kg-day/mg	
changed to:	5.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Inhalation Cancer Potency Factor (CPF _i)	
previous value:	Changes Made		Comments
	4.6E+00	kg-day/mg	
	changed to: 3.5E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrolein	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	7.E+04	mg/kg	
	changed to: 1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrolein	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
previous value:	Changes Made		Comments
	1.6E+03	mg/kg	
	changed to: 4.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrolein	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	3.5E+02	µg/L	
	changed to: 8.8E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrolein	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made		Comments
	1.6E+02	µg/L	
	changed to: 4.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrolein	Oral Reference Dose (RfDo)	
previous value:	Changes Made		Comments
	2.E-02	mg/kg-day	
	changed to: 5.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acifluorfen, sodium	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
previous value:	Changes Made		Comments
	4.6E+04	mg/kg	
	changed to: 4.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acifluorfen, sodium	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	1.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.3E+02	µg/L	
changed to:	2.3E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.3E-02	mg/kg-day	
changed to:	1.3E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.E-06	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+02	µg/m3	

changed to:	6.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+01	µg/m3	
changed to:	2.7E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.8E+03	mg/kg	
changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	8.E-04	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	
changed to:	1.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	acetone	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
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	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	3.2E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	7.2E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+03	µg/L	
changed to:	1.6E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+02	µg/L	
changed to:	7.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-01	mg/kg-day	
changed to:	9.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	2-chloro-1,3-butadiene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+00	µg/m3	
changed to:	2.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	2-chloro-1,3-butadiene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+00	µg/m3	
changed to:	9.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	2-chloro-1,3-butadiene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	5.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	2-chloro-1,3-butadiene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tph, mineral oil	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	1.E+03	µg/L	
changed to:	5.E+02	µg/L	Correction to CLARC cleanup level based on Method A table

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+05	µg/L	
changed to:	9.3E+05	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+06	mg/kg	
changed to:	7.E+06	mg/kg	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+04	mg/kg	
changed to:	1.6E+05	mg/kg	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	IRIS update
changed to:	3.5E+04	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+03	µg/L	
changed to:	1.6E+04	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-01	mg/kg-day	
changed to:	2.E+00	mg/kg-day	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	lindane	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.6E-01	µg/L	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.8E-02	µg/L	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.E+02	mg/kg	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.7E-01	mg/kg	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.7E-01	µg/L	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.7E-02	µg/L	
changed to:	Researched-No Data		IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		IRIS deleted cancer potency value. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May

		11 2011 3:54PM
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
	Changes Made	Comments
previous value:	1.5E+00	mg/kg
changed to:	6.6E+01	mg/kg Changed due to change in current IRIS value
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
	Changes Made	Comments
previous value:	1.2E-02	mg/kg
changed to:	5.E-01	mg/kg Changed due to change in current IRIS value
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	5.1E-03	µg/L
changed to:	2.2E-01	µg/L Changed due to change in current IRIS value
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Ground Water, Method B, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	5.1E-04	µg/L
changed to:	2.2E-02	µg/L Changed due to change in current IRIS value
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Oral Cancer Potency Factor (CPFo)
	Changes Made	Comments
previous value:	8.5E+01	kg-day/mg
changed to:	2.E+00	kg-day/mg Changed to current IRIS value
Date of Change	Chemical	Parameter
4/22/2010	ethylene dibromide (EDB)	Oral Reference Dose (RfDo)
	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	9.E-03	mg/kg-day Changed to current IRIS value
Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	Researched-No Data	Oral cancer potency factor unavailable in IRIS to calculate Method C Ground water value.

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.3E+03	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.5E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	Researched-No Data		Oral cancer potency factor unavailable in IRIS to calculate Method B Ground water value.

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.3E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	4.8E+01	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
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12/22/2008	octabromodiphenyl ethers	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
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	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	1.1E+04	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	2.5E+04	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	2.4E+02	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	5.6E+02	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	VP: 9E-10-1.7E-09 mmHg; Decomposes >330oC

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	VP: 3.2E-08-3.47E-08; Decomposes >320oC

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-04	kg-day/mg	

Date of Change	Chemical	Parameter
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12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Oral Reference Dose (RfDo)
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	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	7.E-03	mg/kg-day	

Date of Change	Chemical	Parameter	
12/22/2008	octabromodiphenyl ethers	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		IRIS Researched. No data available. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
12/22/2008	octabromodiphenyl ethers	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.7E+02	µg/L	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	6.7E+00	µg/L	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
changed to:	1.5E+03	mg/kg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
changed to:	1.1E+01	mg/kg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	5.E+00	µg/L	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
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changed to:	4.9E-01	µg/L	Changed consistent with EPA Region 10
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Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.E+00	µg/m3	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.E-01	µg/m3	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Oral Cancer Potency Factor (CPF _o)

	Changes Made		Comments
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
9/19/2008	xylene;o-	Oral Reference Dose (RfD _o)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	Researched-No Data		Xylene occurs in the environment as a mixture of o-, m-, p- xylene. Refer to xylenes (CAS 1330-20-7) for cleanup information

Date of Change	Chemical	Parameter
9/19/2008	xylene;m-	Oral Reference Dose (RfD _o)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	Researched-No Data		Xylene occurs in the environment as a mixture of o-,m-, p- xylene. Refer to xylenes (CAS 1330-20-7) for cleanup information.

Date of Change	Chemical	Parameter
9/19/2008	methyl naphthalene;1-	Oral Reference Dose (RfD _o)

	Changes Made		Comments
previous value:	3.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Toxicity is accounted for in the aromatic TPH fraction greater than EC10 to EC12 with an oral RfD of .02 mg/kg-day. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	4.8E+01	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E-01	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E+00	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	Based on revised HSDB data

Date of Change	Chemical	Parameter
8/14/2008	cadmium in water	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+03	mg/kg	
changed to:	0.E+00	mg/kg	See cadmium in soil

Date of Change	Chemical	Parameter
8/14/2008	cadmium in water	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+01	mg/kg	
changed to:	0.E+00	mg/kg	See cadmium in soil

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.1E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	dichloroethylene;1,2-,cis	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+03	µg/L	
changed to:	3.5E+03	µg/L	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+02	µg/L	
changed to:	1.6E+03	µg/L	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	3.5E+02	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+02	µg/m3
changed to:	3.2E+02	µg/m3

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	1.E-01	mg/kg-day
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	1.E-01	mg/kg-day
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
4/28/2008	dichloroethylene;1,1-	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	6.E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated to correspond to IRIS for toxicity values comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/28/2008	dichloroethylene;1,1-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made	Comments
previous value:	1.8E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated to correspond to IRIS for toxicity values comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.8E-07	µg/m3
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.8E-08	µg/m3
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Surface Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.2E-07 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Surface Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.6E-09 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	5.8E-06 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	5.8E-07 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.4E-01 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.E-02 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.2E-01 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
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4/2/2008	benzo[a]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[k]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[k]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
4/2/2008	benzo[k]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments

previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[k]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	chrysene	Surface Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	chrysene	Surface Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	chrysene	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	chrysene	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous	3.E-02	µg/L	

value:			
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E-05	µg/m3	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E-06	µg/m3	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	indeno[1,2,3-cd]pyrene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	indeno[1,2,3-cd]pyrene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	

4/2/2008	indeno[1,2,3-cd]pyrene	Surface Water, Method B, Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	indeno[1,2,3-cd]pyrene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	gross alpha particle activity	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	1.5E+01	pCi/L	
changed to:	1.5E+01		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	gross beta particle activity	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	4.E+00	mrem/year	
changed to:	4.E+00		Radionuclides with different Unit of Measure than parameter

Gross beta particle activity values are in mrem/year

Date of Change	Chemical	Parameter
4/2/2008	pah	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	Researched-No Data		see benzo(a)pyrene
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/2/2008	radium 226	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	3.E+00	pCi/L	
changed to:	3.E+00		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	radium 226 and 228	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	5.E+00	pCi/L	
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	gross alpha particle activity	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	5.E+00	pCi/L	
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter
Gross alpha particle activity and radium 226 and 228 values are in pCi/L			

Date of Change	Chemical	Parameter
4/2/2008	gross beta particle activity	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	4.E+00	mrem/year	
changed to:	4.E+00		Radionuclides with different Unit of Measure than parameter
Gross beta particle activity values are in mrem/year			

Date of Change	Chemical	Parameter
4/2/2008	radium 226 and 228	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	5.E+00	pCi/L	
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter
Gross alpha particle activity and radium 226 and 228 values are in pCi/L			

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E+02	µg/m3	Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	9.1E+01	µg/m3	Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.E-01	µg/m3	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.E-02	µg/m3	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.2E+02	mg/kg	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
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4/1/2008	dichloroethylene;1,1-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
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	Changes Made		Comments
previous value:	1.7E+00	mg/kg	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+01	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E+00	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.3E-01	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.3E-02	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-02	mg/kg-day	Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter
4/1/2008	dinitrotoluene mixture;2,4-/2,6-	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	6.8E-01	kg-day/mg	
changed to:	6.8E-01	kg-day/mg	

Date of Change	Chemical	Parameter
11/6/2007	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.1E-02	mg/kg	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.6E-04	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	8.8E-04	mg/kg
changed to:	1.5E-03	mg/kg
		Updated to reflect MTCA rule amendments

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
11/6/2007	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.7E-06	mg/kg
changed to:	1.1E-05	mg/kg
		Updated to reflect MTCA rule amendments

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
11/6/2007	indeno[1,2,3-cd]pyrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	indeno[1,2,3-cd]pyrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	dibenzo[a,h]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	dibenzo[a,h]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	chrysene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	chrysene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[k]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[k]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[b]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[b]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[a]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg

changed to:	see additional information	Updated to reflect MTCA rule amendments
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Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[a]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
8/9/2007	ethylbenzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+03	µg/m3	
changed to:	4.6E+02	µg/m3	

Date of Change	Chemical	Parameter
8/9/2007	ethylbenzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+04	µg/m3	
changed to:	1.E+03	µg/m3	

Date of Change	Chemical	Parameter
11/22/2006	arsenic, inorganic	Ground Water ARAR - State Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	5.E-02	mg/L	
changed to:	1.E-02	mg/L	

Date of Change	Chemical	Parameter
5/22/2006	dichloroethylene;1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+01	µg/L	
changed to:	4.E+02	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	butadiene;1,3-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E-01	kg-day/mg	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E+05	µg/L	
changed to:	4.7E+04	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+04	µg/L	
changed to:	1.9E+04	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+03	µg/L	
changed to:	1.4E+03	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+03	µg/L	
changed to:	6.4E+02	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+05	mg/kg	
changed to:	2.8E+05	mg/kg	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	6.4E+03	mg/kg	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	8.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
1/17/2006	butadiene;1,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-04	mg/kg-day	

Date of Change	Chemical	Parameter
1/17/2006	butadiene;1,3-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-04	mg/kg-day	

Date of Change	Chemical	Parameter
1/3/2006	toluene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+02	µg/m3	
changed to:	4.9E+03	µg/m3	

Date of Change	Chemical	Parameter
1/3/2006	toluene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/m3	
changed to:	2.2E+03	µg/m3	

Date of Change	Chemical	Parameter
1/3/2006	hexane;n-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+02	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter
1/3/2006	hexane;n-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+01	µg/m3	
changed to:	3.2E+02	µg/m3	

Date of Change	Chemical	Parameter
1/3/2006	toluene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.1E-01	mg/kg-day	
changed to:	1.4E+00	mg/kg-day	

Date of Change	Chemical	Parameter
1/3/2006	hexane;n-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.7E-02	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
12/19/2005	xylene;o-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	1.E+02	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylene;o-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	4.6E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylene;m-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous	7.E+02	µg/m3	

value:			
changed to:	1.E+02	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylene;m-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	4.6E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	3.5E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E+03	µg/L	
changed to:	5.E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+03	µg/L	
changed to:	2.E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+01	µg/L	
changed to:	7.E+01	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	3.2E+01	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	1.4E+04	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	3.2E+02	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E+00	µg/m3	
changed to:	3.E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E+00	µg/m3	
changed to:	1.4E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	butadiene;1,3-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	9.8E-01	kg-day/mg	
changed to:	1.1E-01	kg-day/mg	

Date of Change	Chemical	Parameter
12/19/2005	xylene;o-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/19/2005	xylene;m-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E-03	mg/kg-day	
changed to:	8.6E-03	mg/kg-day	

Date of Change	Chemical	Parameter
10/4/2005	formaldehyde	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	4.6E-02	kg-day/mg	
changed to:	4.6E-02	kg-day/mg	

Date of Change	Chemical	Parameter
10/4/2005	formaldehyde	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	1.5E-01	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	toluenediamine;2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	methyl tert-butyl ether	Oral Cancer Potency Factor (CPF _o)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.8E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	ethyl chloride	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	ethyl chloride	Oral Cancer Potency Factor (CPF _o)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	dichloroethylene;1,2-,trans	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
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previous value:	Researched-No Data		
changed to:	2.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	dichloroethane;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.4E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	dichloroethane;1,2-	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-02	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	dibenzofuran	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	ddd	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.4E-01	kg-day/mg

Date of Change	Chemical	Parameter
10/3/2005	chloroaniline;p-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	4.E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	butyl benzyl phthalate	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.9E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Inhalation Cancer Potency Factor (CPF _i)

	Changes Made	Comments
previous value:	Researched-No Data	

changed to:	1.7E-01	kg-day/mg	
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Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-03	mg/kg-day	

Date of Change	Chemical	Parameter
9/28/2005	polychlorinated biphenyls	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	Researched-No Data		see PCB Mixtures
changed to:	1.E-01	µg/L	

Date of Change	Chemical	Parameter
9/21/2005	cyanide	Surface Water ARAR - Aquatic Life - Marine/Chronic - Ch. 173-201A WAC

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	µg/L	

Date of Change	Chemical	Parameter
9/21/2005	ammonia	Surface Water ARAR - Aquatic Life - Marine/Chronic - Ch. 173-201A WAC

	Changes Made		Comments
previous value:	3.5E-02	µg/L	
changed to:	3.5E+01	µg/L	

Date of Change	Chemical	Parameter
9/21/2005	ammonia	Surface Water ARAR - Aquatic Life - Marine/Acute - Ch. 173-201A WAC

	Changes Made		Comments
previous value:	2.3E-01	µg/L	
changed to:	2.3E+02	µg/L	

Date of Change	Chemical	Parameter
9/21/2005	dinitrotoluene;2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-03	mg/kg-day	

Date of Change	Chemical	Parameter
9/21/2005	dinitrotoluene;2,4-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-03	mg/kg-day	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous	8.6E+01	µg/L	

value:			
changed to:	8.1E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	9.5E+01	µg/L	
changed to:	9.E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	1.E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	1.2E+02	µg/L	
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	silver	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	2.3E+00	µg/L	
changed to:	1.9E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	silver	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	4.1E+00	µg/L	
changed to:	3.4E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	selenium and compounds	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	3.E+02	µg/L	
changed to:	2.9E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	nickel soluble salts	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	8.3E+00	µg/L	
changed to:	8.2E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	nickel soluble salts	Surface Water ARAR - Aquatic Life - Marine/Acute - National

		Toxics Rule, 40 CFR 131
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	Changes Made		Comments
previous value:	7.5E+01	µg/L	
changed to:	7.4E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	mercury	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	2.1E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	8.5E+00	µg/L	
changed to:	8.1E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	2.2E+02	µg/L	
changed to:	2.1E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	3.2E+00	µg/L	
changed to:	2.5E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	8.2E+01	µg/L	
changed to:	6.5E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	2.9E+00	µg/L	
changed to:	2.4E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	2.9E+00	µg/L	
changed to:	2.4E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.2E+01	µg/L
changed to:	1.1E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.8E+01	µg/L
changed to:	1.7E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(VI)	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.1E+01	µg/L
changed to:	1.E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(VI)	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.6E+01	µg/L
changed to:	1.5E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(III)	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	2.1E+02	µg/L
changed to:	1.8E+02	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(III)	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.7E+03	µg/L
changed to:	5.5E+02	µg/L

Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	4.3E+01	µg/L
changed to:	4.2E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.1E+00	µg/L

changed to:	1.E+00	µg/L	
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Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	3.9E+00	µg/L	
changed to:	3.9E+00	µg/L	

Date of Change	Chemical	Parameter
9/19/2005	dieldrin	Surface Water ARAR - Aquatic Life - Marine/Chronic - Clean Water Act §304

	Changes Made		Comments
previous value:	2.E-03	µg/L	
changed to:	1.9E-03	µg/L	

Date of Change	Chemical	Parameter
9/19/2005	dieldrin	Surface Water ARAR - Aquatic Life - Marine/Acute - Clean Water Act §304

	Changes Made		Comments
previous value:	7.E-01	µg/L	
changed to:	7.1E-01	µg/L	

Date of Change	Chemical	Parameter
9/14/2005	naphthalene	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	2.E+01	µg/L	
changed to:	1.6E+02	µg/L	

Date of Change	Chemical	Parameter
9/12/2005	cyanide	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	1.4E+02	µg/L	

Date of Change	Chemical	Parameter
9/12/2005	dichloroethylene;1,2-,trans	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	1.4E+05	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	nickel soluble salts	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	1.E-01	mg/L	
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+04	µg/L	
changed to:	5.8E+04	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+03	µg/L	
changed to:	2.3E+04	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	8.8E+02	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+04	mg/kg	
changed to:	1.8E+05	mg/kg	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+02	mg/kg	
changed to:	4.E+03	mg/kg	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-03	mg/kg-day	
changed to:	5.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
8/23/2005	chlorpyrifos	Surface Water ARAR - Aquatic Life - Marine/Acute - Clean Water Act §304

	Changes Made		Comments
previous value:	0.E+00	µg/L	
changed to:	1.1E-02	µg/L	

Date of Change	Chemical	Parameter
8/22/2005	bromoform	Ground Water ARAR - Federal Maximum Contaminant Level Goal (MCLG)

	Changes Made		Comments
previous value:	0.E+00	mg/L	
changed to:	8.E-02	mg/L	

Date of Change	Chemical	Parameter
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8/22/2005	fluoride	Ground Water, Method C, Non-carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.1E+03	µg/L	

Date of Change	Chemical	Parameter
8/22/2005	fluoride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	9.6E+02	µg/L	

Date of Change	Chemical	Parameter
8/22/2005	fluoride	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	

Date of Change	Chemical	Parameter
8/18/2005	boron	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-03	mg/kg-day	

Date of Change	Chemical	Parameter
8/18/2005	boron	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	7.E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	boron	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	boron	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	boron	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+03	µg/L	
changed to:	3.2E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	3.2E+02	µg/m3	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+03	µg/L	
changed to:	7.E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+03	µg/L	
changed to:	3.2E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-04	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
8/17/2005	barium and compounds	Oral Reference Dose (RfDo)

	Changes Made	Comments
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previous value:	7.E-02	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
8/17/2005	boron	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-02	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
8/16/2005	vinyl chloride	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.5E-01	kg-day/mg	
changed to:	1.5E+00	kg-day/mg	

Date of Change	Chemical	Parameter
7/12/2005	polychlorinated biphenyls	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E+00	kg-day/mg	

Date of Change	Chemical	Parameter
7/12/2005	polychlorinated biphenyls	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E+00	kg-day/mg	

Date of Change	Chemical	Parameter
7/6/2005	methyl tert-butyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-01	mg/kg-day	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E+00	µg/m3	
changed to:	2.2E-01	µg/m3	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E-01	µg/m3	
changed to:	2.2E-02	µg/m3	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	3.3E+02	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+01	mg/kg	
changed to:	2.5E+00	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+01	µg/L	
changed to:	1.1E+00	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	1.1E-01	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.6E+01	µg/L	
changed to:	1.5E+00	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Bioconcentration Factor (BCF)

	Changes Made		Comments
previous value:	1.1E+01	L/kg	
changed to:	1.1E+01	L/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.6E+03	mg/kg	
changed to:	2.4E+02	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E+01	mg/kg	
changed to:	1.9E+00	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	8.6E+00	µg/L	
changed to:	8.1E-01	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.6E-01	µg/L	
changed to:	8.1E-02	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E+03	µg/L	
changed to:	2.1E+03	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/L	
changed to:	9.7E+00	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+00	µg/L	
changed to:	3.9E-01	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.5E+02	µg/L	
changed to:	8.4E+02	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Bioconcentration Factor (BCF)

	Changes Made		Comments
previous value:	3.1E+01	L/kg	
changed to:	3.1E+01	L/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+03	µg/L	
changed to:	3.7E+01	µg/L	

Date of Change	Chemical	Parameter
6/15/2005	trichloroethylene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-02	kg-day/mg	

changed to:	4.E-01	kg-day/mg	
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Date of Change	Chemical	Parameter
6/15/2005	trichloroethylene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	1.7E-02	kg-day/mg	
changed to:	4.E-01	kg-day/mg	

Date of Change	Chemical	Parameter
5/18/2005	methyl naphthalene;2-	Vapor Pressure (VP)

	Changes Made		Comments
previous value:	6.8E-02	mmHg	
changed to:	5.5E-02	mmHg	

Date of Change	Chemical	Parameter
5/18/2005	naphthalene	Vapor Pressure (VP)

	Changes Made		Comments
previous value:	7.5E-02	mmHg	converted 0.01 kPA (as listed in HSDB) to mm Hg 1/3/2003
changed to:	8.5E-02	mmHg	

Date of Change	Chemical	Parameter
3/2/2005	tetrachloroethylene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.1E-02	kg-day/mg	

Date of Change	Chemical	Parameter
3/2/2005	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	5.1E-02	kg-day/mg	
changed to:	5.4E-01	kg-day/mg	

Date of Change	Chemical	Parameter
2/9/2005	nitrite	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	1.3E+05	mg/kg	

Date of Change	Chemical	Parameter
2/9/2005	trichloroethylene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	trichloroethylene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-04	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	xlenes	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	xlenes	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	benzene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	4.E-03	mg/kg-day	

Date of Change	Chemical	Parameter
12/21/2004	biphenyl;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/21/2004	ethylbenzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E+00	mg/kg-day	
changed to:	2.9E-01	mg/kg-day	

Date of Change	Chemical	Parameter
12/10/2004	nitrate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-01	mg/kg-day	
changed to:	1.6E+00	mg/kg-day	

Date of Change	Chemical	Parameter
12/1/2004	trichlorobenzene;1,2,4-	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	2.6E+02	µg/L	
changed to:	3.5E+01	µg/L	

Date of Change	Chemical	Parameter
12/1/2004	thallium, soluble salts	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	1.7E+00	µg/L	
changed to:	2.4E-01	µg/L	

Date of Change	Chemical	Parameter
8/6/2004	acetone cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.4E+01	mg/kg	
changed to:	6.4E+01	mg/kg	

Date of Change	Chemical	Parameter
7/1/2004	carbon disulfide	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	2.E+00	unitless	
changed to:	2.E+00	unitless	

Date of Change	Chemical	Parameter
7/1/2004	propylene glycol monoethyl ether	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	2.E+00	unitless	Based on chemical similiarities with other propylene glycols.
changed to:	2.E+00	unitless	Based on chemical similiarities with other propylene glycols.

Date of Change	Chemical	Parameter
6/25/2004	thallic oxide	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	1.E+00	unitless	Thalliumsolublesalt.
changed to:	1.E+00	unitless	Thalliumsolublesalt.